

REMARKS

Claims 1, 2, and 4-15 now stand in the application, parent claim 1 having been amended to more particularly meet the formal requirements of 35 U.S.C. § 112. Claim 3 has been cancelled, and new claim 15 has been added to afford the patent protection to which Applicant believes itself to be entitled.

In accordance with a characterizing feature of Applicant's improved position detecting system recited in amended claim 1, the tracking of the mobile component (i.e., lever 10) is effected around three axes of rotation by the use of two arrays of photodetectors (22). As stated on Page 2, lines 4-7:

“Accordingly, it is a primary object of the present invention to provide an improved control device equipped with reliable and inexpensive sensors, for detecting the position of the mobile component and for tracking its displacements around three axes of rotation over angular displacements of maximum value.” [Emphasis added]

Regarding the 35 U.S.C. 102(b) rejection of claims 1-3, 8-12, and 14 in light of Fincher (US 4,533,827), Applicant courteously contends that as distinguished from the present invention including two arrays of photodetectors and a mobile component that is rotatable around three different axes, Fincher needs three combinations of emitters and detectors. Further, whereas the present invention comprises one spherical portion carrying optically detectable points, Fincher needs three spherical portions of different diameters. Further, the surfaces of the spherical portion according to the present invention do not require a varying reflectivity, whereas the surfaces of the spherical portions in Fincher do require a varying relectivity.

Regarding the 35 U.S.C. 103(a) rejection of claims 4-7 in light of Fincher (US 4,533,827), the specific positioning of the photodetectors, namely at 90 degree angles

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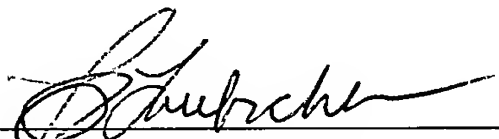
from each other in claims 4 and 5, is not an obvious modification of Fincher because Fincher does not have two arrays of photodetectors.

Further, regarding claims 6 and 7, the selection of three rows and three columns of photodetectors defining the array of photodetectors is necessary to carry out the searching and identification of the points that are uniformly distributed on the support. Applicant contends that the row and column array disclosed in the present invention is unique and necessary to perform the identification and positioning logic conducted by the information processing means.

Favorable action is courteously solicited.

Respectfully submitted,

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